

RTIP ID# <i>(required)</i> SBD44810					
Project Description <i>(clearly describe project)</i> <p>The description provided in the RTIP is as follows: "I-10 Tippecanoe Interchange I/C configuration & add auxiliary lanes (auxiliary lane is for eastbound traffic from Waterman On-ramp to Tippecanoe Off-ramp).</p> <p>Interstate 10 (I-10) is a major urban freeway serving commuter, trucking and personal travel needs for a number of cities and communities in Los Angeles, San Bernardino and Riverside Counties. The existing Tippecanoe Avenue/I-10 Interchange on-ramps and off-ramps, and intersections at the ramp termini within the project limits, are already operating either at capacity or in excess of capacity. Unless improvements are implemented in the near future for the Tippecanoe Avenue/I-10 Interchange, traffic conditions are expected to worsen over time, resulting in increased commuting times, greater commuter frustration, higher travel costs, and increased air pollution. In addition, poor levels of service are expected to result in adverse impacts on adjacent interchanges and the local street network as motorists seek less-congested alternate routes.</p> <p>In August 2002, Caltrans approved a Project Study Report (Project Development Support) [PSR (PDS)] identifying the need for a modification/improvement of Tippecanoe Avenue/I-10 Interchange. The PSR(PDS) recommended the access to the freeway by upgrading the Tippecanoe Avenue/I-10 Interchange with the addition of new ramps and widening of existing ramps. The PSR(PDS) also recommended reducing congestion of Tippecanoe Avenue and Anderson Street by adding through and turn lanes and increasing the distance between ramp termini intersections and the intersection at Anderson Street/Redlands Boulevard.</p> <p>San Bernardino Associated Governments (SANBAG), in conjunction with the City of Loma Linda, the Loma Linda University Medical Center, and the City of San Bernardino, lead agencies for this study, in cooperation with the California Department of Transportation (Caltrans), is advancing an alternative for the improvements of Tippecanoe Avenue/I-10 Interchange. Modification and improvement of the existing interchange will improve mainline and ramp traffic operations, reduce local street congestion and accommodate projected growth in the area.</p>					
Type of Project <i>(use Table 1 on instruction sheet)</i> Reconfigure existing interchange, intersection channelization, intersection signalization.					
County San Bernardino		Narrative Location/Route & Postmiles I-10 at Tippecanoe Ave, Postmile 25.3 to 27.3 Caltrans Projects – EA# 44810			
Lead Agency: San Bernardino Associated Governments					
Contact Person Dennis Saylor		Phone# (909)889-8611 x132		Fax# (909)388-2002	Email dsaylor@sanbag.ca.gov
Hot Spot Pollutant of Concern <i>(check one or both)</i> PM2.5 X PM10 X					
Federal Action for which Project-Level PM Conformity is Needed <i>(check appropriate box)</i>					
Categorical Exclusion (NEPA)	X	EA or Draft EIS	FONSI or Final EIS	PS&E or Construction	Other

Scheduled Date of Federal Action:**Current Programming Dates** *as appropriate*

	PE/Environmental	ENG	ROW	CON
Start	01/06	06/08	06/08	06/10
End	05/08	06/10	06/10	06/12

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*

The purpose of the Tippecanoe Avenue/I-10 Interchange project is to mitigate existing and projected capacity and operational deficiencies at the Tippecanoe Avenue/I-10 Interchange and local roads from the rapidly increasing traffic demand generated by the accelerated growth and development that is taking place in the cities of Loma Linda and San Bernardino in San Bernardino County, California. It is also designed to improve local circulation on those streets and streets that feed them with emphasis on enhanced access to Loma Linda University Medical Center, Loma Linda University, Jerry Pettis Veterans Administration Hospital, San Bernardino International Trade Center and the San Bernardino International Airport.

Unless improvements are implemented in the near future for the Tippecanoe Avenue/I-10 Interchange, traffic conditions are expected to worsen over time, resulting in increased commuting times, greater commuter frustration, higher travel costs, and increased air pollution. In addition, poor levels of service are expected to result in adverse impacts on adjacent interchanges and the local street network as motorists seek less-congested alternate routes. The elevated levels of traffic congestion pose a safety hazard because emergency vehicles cannot access the health facilities in Loma Linda in a timely manner.

Traffic forecasts indicate that the eastbound Tippecanoe off-ramp is currently operating at Level of Service (LOS) D in the AM peak hour and at LOS F in the PM peak hour. Without the project, LOS will deteriorate to LOS F with delays of 6 to 9 minutes in 2035 in morning and afternoon peak hours because traffic volumes are already very high and are predicted to more than double. 2004 Average Daily Traffic (ADT) volume for this off-ramp is estimated at 14,200, with Year 2035 estimates at 32,600. With project construction, LOS will be at D in the morning and at C in the afternoon peak hours, with delays of less than a minute in both periods (SANBAG 2006). Traffic forecasts are similar for other components of the project.

The Tippecanoe Avenue/I-10 Interchange project would improve LOS at the intersections and the ramps during morning and evening rush hours, which in turn will provide for improved access to medical facilities, residential areas, commercial centers, and shopping centers. The proposed street and interchange improvements would mitigate the deficiencies documented above and provide for improved mobility and economic vitality of the area.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

The Tippecanoe Avenue/ I-10 Interchange is located within the Cities of Loma Linda and San Bernardino in the County of San Bernardino. The Cities of Loma Linda and San Bernardino are surrounded by the Cities of Colton, Highland and Redlands. The San Bernardino International Airport is located north of the project location and Loma Linda University is located south of the project location. The primary land use in the vicinity of the project site is commercial, with some residential uses (in the northeast project quadrant).

Interstate 10 serves as a major east-west freeway that originates at the junction with State Routes 1 and 2 in the City of Santa Monica, Los Angeles County, and extends easterly through the Los Angeles metropolitan area and into Arizona and terminating at the east coast in the state of Florida. East of the junction with State Route 60, I-10 has been identified in the 1998 Interregional Transportation Strategic Plan as a High Emphasis Route included in the Arizona Gateway Route. I-10 is also included in the State Freeway and Expressway System with the Federal Functional classifications of Rural Principal Arterial and extension of a Rural Principal Arterial into an urban area. I-10 is designated in the National Highway System (NHS), Department of Defense Rural Interstates and Single Routing in Urban Areas and the Strategic Highway Corridor Network (STRAHNET). Based on Caltrans historic traffic data, the 2005 average daily traffic (ADT) on I-10 ranges from 28,000 at the Arizona State Line to 329,000 in the City of Los Angeles.

Interstate 10 is the major corridor for interstate and interregional movement of people and goods and is one of the major commuter routes between Los Angeles and the Inland Empire (San Bernardino and Riverside Counties). In addition, the I-10 corridor is the major link between the rural areas in eastern Riverside County to the urban centers in the western part of San Bernardino County. It also serves the recreational traffic from Los Angeles and western San Bernardino and Riverside Counties to the resorts in the Coachella Valley, the Salton Sea area and recreational facilities along the Colorado River. I-10, in the Cities of Loma Linda and San Bernardino, is an eight-lane facility with four mixed flow lanes in each direction separated by a median with concrete barrier. The 2000 Route Concept Fact Sheet projects the need for an additional High Occupancy Vehicle (HOV) lane in each direction through the proposed project limits.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Opening Year is 2012. LOS analysis is currently not available. AADT = 253,010. Truck AADT = 30,361 (12%)

Note: Information above is based on linear interpolation based on 2004 Existing Data and 2035 Forecasted Data.

RTP Horizon/Design Year : Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Refer to tables shown below for LOS. AADT = 326,970. Truck AADT = 39,236 (12%)

MAINLINE FREEWAY LOS SUMMARY

Dir	From/To:	2004 Existing	2035 Alternative 1 No Build Condition	2035 Alternative 2 Build Condition
EB	Waterman Ave. to Tippecanoe Ave.	C / E	E / F	D / F
	Tippecanoe Ave. to Mountain View Ave.	C / E	C / F	C / F
WB	Mountain View Ave. to Tippecanoe Ave.	E / D	F / E	F / E
	Tippecanoe Ave. to To Waterman Ave.	D / C	E / D	E / D

XX/XX=AM Results/ PM Results

FREEWAY RAMP LOS SUMMARY

Dir	From/To:	Section Type	2004 Existing	2035 Alternative 1 No Build Condition	2035 Alternative 2 Build Condition
EB	Tippecanoe Ave. Off-Ramp	Diverge	D / F	F / F	D / F
	Tippecanoe Ave. On-Ramp	Merge	B / C	C / F	C / F
WB	Tippecanoe Ave. Off-Ramp	Diverge	F / F	F / F	F / F
	Tippecanoe Ave. Loop On-Ramp	Merge	NA	NA	F / C

XX/XX=AM Results/ PM Results

RTP Horizon/Design Year : Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility (cont.)

FREEWAY WEAVING LOS SUMMARY

Dir	From/To:	2004 Existing	2035 Alternative 1 No Build Condition	2035 Alternative 2 Build Condition
EB	Waterman Ave. On - Tippecanoe Ave. Off	NA*	NA*	E / D
WB	Tippecanoe Ave. On - Carnegie Dr Off	C / C	E / E	C / D

XX/XX=AM Results/ PM Results

* - No Auxiliary Lane

FREEWAY RAMP INTERSECTIONS LOS SUMMARY

Intersection	2004 Existing	2035 Alternative 1 No Build Condition	2035 Alternative 2 Build Condition
Tippecanoe Ave. @ Redlands Ave.	C / D	F / F	C / D
Tippecanoe Ave. @ EB Ramps	C / D	F / F	D / C
Tippecanoe Ave. @ WB Ramps	C / D	F / F	NA
Tippecanoe Ave. @ Laurelwood Dr.	C / C	C / C	C / C

XX/XX=AM Results/ PM Results

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Truck percentage is same as above.

OPENING YEAR (YEAR 2012) TRAFFIC DATA

DIRECTION	LOCATION	AADT
Eastbound	Waterman Ave. On-Ramp	10,556
	W. of Tippecanoe Ave. Off-Ramp	132,291
	Tippecanoe Ave. Off-Ramp	19,375
	E. of Tippecanoe Ave. Off-Ramp	112,916
	Tippecanoe Ave. On-Ramp	10,534
	E. of Tippecanoe Ave. On-Ramp	123,450
Westbound	W. of Mt. View Ave. On-Ramp	133,984
	Tippecanoe Ave. Off-Ramp	13,816
	W. of Tippecanoe Ave. Off-Ramp	120,169
	Tippecanoe Ave. On-Ramp	16,044
	W. of Tippecanoe Ave. On-Ramp	136,213

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Truck percentage is same as above.

FUTURE YEAR (YEAR 2035) TRAFFIC DATA

DIRECTION	LOCATION	AADT
Eastbound	Waterman Ave. On-Ramp	13,000
	W. of Tippecanoe Ave. Off-Ramp	177,500
	Tippecanoe Ave. Off-Ramp	32,600
	E. of Tippecanoe Ave. Off-Ramp	144,900
	Tippecanoe Ave. On-Ramp	14,200
	E. of Tippecanoe Ave. On-Ramp	159,100
Westbound	W. of Mt. View Ave. On-Ramp	171,000
	Tippecanoe Ave. Off-Ramp	18,200
	W. of Tippecanoe Ave. Off-Ramp	152,800
	Tippecanoe Ave. On-Ramp	22,800
	W. of Tippecanoe Ave. On-Ramp	175,600

Describe potential traffic redistribution effects of congestion relief (impact on other facilities)

Based on the traffic analysis, the proposed project will not increase traffic volumes between the no build and build conditions. However, without the proposed improvements at Tippecanoe Ave/I-10 Interchange, traffic conditions are expected to worsen over time, resulting in increased commuting times, greater commuter frustration, higher travel costs and increased air pollution. In addition, poor levels of service are expected to result in adverse impacts on adjacent interchanges and the local street network as motorists seek less-congested alternate routes.

Comments/Explanation/Details *(attach additional sheets as necessary)*

Data references:

1. Modified Access Report, 08-SBd-10-PM 25.3/27.2, EA 44810, November 1, 2006.
2. Caltrans, Project Study Report(Project Development Support), August 2002.
3. Traffic Study for I-10 Tippecanoe Interchange-Year 2035 Forecasts, SANBAG, August 2005.

Additional Comments

Particulate Matter (PM₁₀ and PM_{2.5}) Analysis

The proposed project is within a nonattainment area for federal PM_{2.5} and PM₁₀ standards. Therefore, per 40 CFR Part 93, analyses are required for conformity purposes. However, the EPA does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in section 93.123(b)(1) as an air quality concern. The project does not qualify as a project of air quality concern (POAQC) for the following reasons:

- i. The proposed project is not a new or expanded highway project that would have a significant number or a significant increase in diesel vehicles. The existing and future traffic volumes along this segment of I-10 exceed the 125,000 ADT and the eight percent truck traffic POAQC thresholds for new construction. The proposed project would not increase the traffic volumes along this segment of I-10. This type of project improves local circulation by reducing traffic congestion by adding through and turn lanes and increasing the distance between ramp termini intersections and the adjacent local road intersections. Thus, it does not create a significant number or a significant increase in diesel vehicles.
- ii. The proposed project does not adversely affect intersections that are at level of service (LOS) D, E, or F with a significant number of diesel vehicles. The purpose of the proposed project is to improve the LOS at the ramp termini intersections and adjacent local road intersections. This project would not increase the traffic volumes along I-10 and the local roadways within the project vicinity.
- iii. The proposed project does not include the construction of a new bus or rail terminal.
- iv. The proposed project does not expand an existing bus or rail terminal.

Therefore, the proposed project meets the Clean Air Act requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed project would not create a new, or worsen an existing, PM₁₀ or PM_{2.5} violation.